

***Marbled Murrelet Effectiveness Monitoring  
Nesting Habitat Core Team Conference Call 12/16/99***

Jim Baldwin  
Naomi Bentivoglio  
Diane Evans  
Tim Max

Sherri Miller  
Kim Nelson  
Randall Wilk

**Overview**

The group discussed SM's draft outline for habitat modeling work (dated 12/7/99) and our next steps.

**Introduction Section**

One model mentioned, we're talking about doing four models. (SM's write-up focuses on the map model). Make our matrix a section of this product. Needs a detailed description of the two broad models (map and nonmap).

**Objectives**

Talk about four models and geographic scope of project.

**Methods**

N. CA and SW OR section (Marbled Murrelet Conservation Zone 4) is split by the state border which is also the dividing line between the two Forest Service regions 5 and 6. This means there are two different vegetation mapping efforts also. Is there a possibility that Warbington would do SW OR? Seems unlikely given that another region is planning to cover that area and no one is going to be willing to pay for the work to be done to duplicate efforts. That leaves two possibilities:

1. Split and develop two models based on two different vegetation maps. (Group Chose This)
2. Split and lump SW OR with OR Coast Range Province map.

Does this split apply to nonmap model as well? Maybe not, but for the nonuse sites of the nonmap model, satellite information is all we'd have with the exception of the FIA and CVS plots. Also some landowners (Quilcene District, WDNR) may have some vegetation data from survey sites.

DE originally thought they wouldn't be doing SW WA because there's no Federal land; thought they'd just do Olympic and W WA Cascades. However, the IVMP vegetation maps will cover it, so they will do it.

Split the matrix table up. Keep the discussion clear (ie., Methods section map model). Presence data won't be used. Put in our sentence about 8 visits over 2 years, minimum 3 visits in one year. 1994 and later data.

Vegetation Databases - Map Model (this will be separate under nonmap model too) two regions, two products IVMP and the Wildlife Habitat Relationships (WHR) classifications map

(Warbington's products). R6 pixel. Put together time lines for OR/WA provinces.

#### Spatial and temporal Scale - Map Model

Can't use AIC to discern which circle size is appropriate, that is an inappropriate use of AIC.

How do we precisely want to place the circles? I'll ask Ken to talk to Randall/Sherri to get more data to play with. It may be that a grouping of stations is what we have most consistently in the bird databases. What about focusing on the station of occupancy? SM thinks it doesn't matter. Others think it might.

1. Geometric center of stations.
2. Focus on center of station of occupancy detection.
3. Center of polygon (problem is won't have the polygon in many instances).

SM also has problems with a large # of stations within a stand. 4ac -3000 ac ranges of stands. Could go in and select 4 stations and call them a site, blocking it up. RW also mentioned situations in WA where they seem contiguous but were blocked up for survey purposes. Do the statisticians agree it would be ok to do this? Might be. Need to understand better. A: How much of your data could fit the norm (norm being protocol)? A: Almost none were done in 120 acre blocks. Islands of habitat. But the number of visits should meet or exceed protocol in most cases. Some portions might not have met the protocol, but Sherri can determine where. They have already done this through 1997 data. Sherri will put together a 1-page summary of the CA data for the group.

#### Model Development

Principle Components Analysis? Jim and Tim will fine-tune this section - Try to do by mid January.

Comment: Fred Cook in Canada cautioned that they're finding birds in a lot of places they never would have surveyed because of logistics and habitat configuration. If we're building models only on sites we know about, it may be skewed. Some thought this concern may only apply to some portions of WA that are very high elevation, but probably would not be an issue in OR and CA. Note also that we expect to do a certain amount of additional bird surveys as part of the validation of these models.

New number for DE is 208-634-0648. Use Olympia email and she'll have forwarded delete Moscow email address.

#### To Do List

1. Sherri will put together a 1-page summary of the CA data for the group.
2. Naomi will take the document from here and incorporate today's comments.
3. Naomi will call Jim Alegria about the vegetation mapping schedule.
4. Jim and Tim will work on the Model Development section.
5. Ken will contact Randall and Sherri for more data to work with for centering circles on stands.